

Astronomy TAG 1.5: Explore
Why Are Craters More Difficult
to Find on Earth Than on the Moon?

Name _____

Hour _____ Date _____

Read p. 39-41 Compare the pictures of the craters on the Earth to those on the moon. What do you notice?



Moon's Craters	Earth's Craters

Reflect p. 41

1. Many of the craters on the Moon are much older than the craters on Earth. Compare the craters. What features are clearly visible on the Moon and not on Earth?
2. Why do you think the craters on the Moon and the craters on Earth look different? What processes on Earth are different from those on the moon?
3. Why might it be easier to find craters on Earth using satellite images rather than pictures taken from the ground? Think about the images you observed of Roter Kamm as you develop your answer.

Read *The Covering and Uncovering of Chicxulub Crater* p. 42-43



Stop & Think

1. What methods do scientists use to look for evidence of impact craters on Earth?

2. What did this reading tell you about why the impact craters on Earth look so different from those on the Moon?
3. What other factors do you think make the impact craters on Earth look different from those on the Moon? How do you think these factors might the creation of impact craters?

Explain: Read p. 44. With your table group, use what you have read, what you know about how impact craters are formed, and what you know about the differences between Earth and the Moon to write an Explanation of why Earth's impact craters look so different from the Moon's impact craters. Use a *Create an Explanation* page.

Communicate: Follow your teacher's instructions for sharing your Explanation.

Reflect

1. What changes would you expect to observe in Meteor Crater if you could come back and look at it a million years from now?
2. Which of the craters examined by your class would Meteor Crater be most like in a million years?
3. Another difference between Earth and Moon is that Earth has water on its surface. How do you think the structure of a crater would change if a meteorite struck water instead of striking land?
4. Why do you think there are fewer impact craters on Earth than on the moon?
5. Why do you think impact craters on the Moon are larger than impact craters on Earth?



What's the Point? P. 46

What is the main idea of LS 1.5?

